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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,979	07/10/2003	Sadao Yashiro	1081.1179	1258

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EXAMINER
HUYNH, THU V

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/615,979	YASHIRO, SADAO
	Examiner	**Art Unit**	
	Thu V. Huynh	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *20 April 2006*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-18* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-18* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: amendment filed on 04/20/06 to application

filed on 07/10/03, which has foreign priority filed on 07/30/02.

2.   Claims 1-18 are currently amended.

3.   Claims 1-18 are pending in the case. Claims 1, 9, 16 and 18 are independent claims.

4.   The objections of claims 3 and 8 because informalities have been withdrawn as

necessitated by the amendment.

5.   All the rejections of claims 1-18 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter, have been withdrawn as necessitated

by the amendment.

6.   The rejections of claims 1, 3-9, 11-18 in the previous office action have been withdrawn

as necessitated by the amendment.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

8.   Claims 2 and 10 remain rejected under 35 U.S.C. 102(e) as being anticipated by

O'Neil et al., US 2003/0110150 A1, priority filed 11/30/01.

Regarding independent claim 2, O'Neil teaches:

- dividing, by a computer, a structured document, which is composed of tagged

  documents listed sequentially and ordered hierarchically, by tags, in a file (O'Neil,

  figures 2-4; [0019], [0032], [0045], [0046]; dividing hierarchically xml structured

  document in fig.2 by tag elements into a file in fig.4);

- converting said structured document into tagged documents represented by XML

  format that added positional information indicating a position in said structure

  document to said divided documents (O'Neil, figures 2-4; [0019], [0032], [0045],

  [0046]; converting the xml structured document in fig.2 into tagged documents in

  fig.4 that added depth and index information (ORDPATH information) indicating a

  position in the xml structured document);

- wherein said converting comprises adding said positional information as attribute

  information in said tag (O'Neil, fig.4; "ORDPATH" information are attributes of tag

  elements).

Regarding independent claim 10, O'Neil teaches:

- dividing, by a computer, a structured document represented by XML format, which is

  composed of tagged documents listed sequentially and ordered hierarchically, by tags

  in a file (O'Neil, figures 2-4; [0019], [0032], [0045], [0046]; dividing xml structured

  document in fig.2 by tag elements into a file in fig.4);

- converting said structured document into tagged documents that added positional

  information indicating a position in said structure document to said divided

  documents (O'Neil, figures 2-4; [0019], [0032], [0045], [0046]; converting the xml

index information (ORDPATH information) indicating a position in the xml

structured document);

- rearranging said tagged documents in accordance with said positional information of

said converted tagged documents (O'Neil, [0047]; reconstructing the xml document

in fig.2 from the tagged documents in fig.4 based on "ORDPATH" information); and

- restoring said structured document represented by the XML format by deleting said

positional information from said tagged documents (O'Neil, [0047]; reconstructing

the xml document in fig.2 from the tagged documents in fig.4, wherein the

ORDPATH information does not appear in tagged documents in the reconstructed

document).

- wherein said converting comprises adding said positional information as attribute

information in said tag (O'Neil, fig.4; "ORDPATH" information are attributes of tag

elements).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
manner in which the invention was made.

9.   **Claims 1, 3-4, 6-9, 11-12 and 14-18 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over O'Neil et al., US 2003/0110150 A1, priority filed 11/30/01 in view of

Jones et al., US 2004/0205583 A1, filed 06/27/02.

       Regarding independent claim 1, O'Neil teaches the steps of:

- dividing, by a computer, a structured document represented by XML format, which is

  composed of tagged documents listed sequentially and ordered hierarchically, by tags,

  in a file (O'Neil, figures 2-4; [0019], [0032], [0045], [0046]; dividing hierarchically

  xml structured document in fig.2 by tag elements into a file in fig.4);

- converting said structured document into tagged documents that added positional

  information indicating a position in said structure document to said divided

  documents, wherein said converting comprises converting the structured document to

  a new structured document represented by XML format that added index and depth

  information for said structured documents by means of attribute values (O'Neil,

  figures 2-4; [0019], [0032], [0045], [0046]; converting the xml structured document

  in fig.2 into tagged documents in fig.4 that added depth and index information

  (ORDPATH information are attributes of tag elements) indicating a position in the

  xml structured document);

       However, O'Neil does not explicitly disclose attribute values restricted by a namespace.

       Jones teaches elements of an XML file have an associated namespace; each XML

document can use a namespace to identify the type of XML associated with the document (Jones,

[0001], [0002]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Jones' teaching of namespace into O'Neil's XML document to associate a namespace to the document, since the combination would have used the namespace for identify the type, the elements of the XML document, wherein the namespace is commonly used as Jones' disclosed in paragraph 0002.

Regarding claim 3, which is dependent on claim 2, O'Neil teaches converting comprises converting the structured document to a new structured document that added index and depth information for said documents by means of attribute values (O'Neil, figures 2-4; [0019], [0032], [0045], [0046]; converting the xml structured document in fig.2 into tagged documents in fig.4 that added depth and index information (ORDPATH information) indicating a position in the xml structured document). However, O'Neil does not explicitly disclose attribute values restricted by a namespace.

Jones teaches elements of an XML file have an associated namespace; each XML document can use a namespace to identify the type of XML associated with the document (Jones, [0001], [0002]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Jones' teaching of namespace into O'Neil's XML document to associate a namespace to the document, since the combination would have used the namespace for identify the type, the elements of the XML document, wherein the namespace is commonly used as Jones' disclosed in paragraph 0002.

Regarding claim 4, which is dependent on claim 1, O'Neil teaches transferring said

tagged documents in a designated priority order (O'Neil, fig.4, [0047], transferring the divided

documents, which is specified in ORDPATH priority for reconstructing).

Regarding claim 6, which is dependent on claim 1, O'Neil teaches rearranging said

tagged documents in accordance with said positional information of said converted tagged

documents and deleting said positional information from said tagged documents to restore said

original structured document represented by XML format (O'Neil, [0047]; reconstructing the

xml document in fig.2 from the tagged documents in fig.4, wherein the ORDPATH information

does not appear in tagged documents in the reconstructed document).

Regarding claim 7, which is dependent on claim 2, O'Neil teaches extracting said

positional information from said converted tagged documents and rearranging said tagged

documents in accordance with said positional information; and deleting said position information

from said tagged documents to restore said original structured document represented by XML

format (O'Neil, [0047]; reconstructing the xml document in fig.2 from the tagged documents in

fig.4 based on "ORDPATH" information, wherein the ORDPATH information does not appear

in tagged documents in the reconstructed document).

Regarding claim 8, which is dependent on claim 3, O'Neil teaches rearranging said

tagged documents in the line direction of the document, in accordance with said indexes of said

converted tagged documents; and ordering said tagged documents hierarchically, in accordance

with said depth information of said tagged documents to restore said original structured

document represented by XML format (O'Neil, [0047]; reconstructing the xml document in fig.2

from the tagged documents in fig.4 based on "ORDPATH" information, wherein the ORDPATH

information does not appear in tagged documents in the reconstructed document).

Regarding independent claim 9, O'Neil teaches the steps of:

- dividing, by a computer, a structured document represented by XML format, which is
  composed of tagged documents listed sequentially and ordered hierarchically, by tags
  in a file (O'Neil, figures 2-4; [0019], [0032], [0045], [0046]; dividing xml structured
  document in fig.2 by tag elements into a file in fig.4);

- converting said structured document into tagged documents that added positional
  information indicating a position in said structure document to said divided
  documents (O'Neil, figures 2-4; [0019], [0032], [0045], [0046]; converting the xml
  structured document in fig.2 into tagged documents in fig.4 that added depth and
  index information (ORDPATH information) indicating a position in the xml
  structured document);

- rearranging said tagged documents in accordance with said positional information of
  said converted tagged documents (O'Neil, [0047]; reconstructing the xml document
  in fig.2 from the tagged documents in fig.4 based on "ORDPATH" information); and

- restoring said structured document represented by the XML format by deleting said
  positional information from said tagged documents (O'Neil, [0047]; reconstructing
  the xml document in fig.2 from the tagged documents in fig.4, wherein the

ORDPATH information does not appear in tagged documents in the reconstructed

document).

- wherein said converting comprises converting the structured document to a new

structured document represented by XML format that added index and depth

information for said structured documents by means of attribute values (O'Neil, fig.4;

"ORDPATH" information are attributes of tag elements).

However, O'Neil does not explicitly disclose attribute values restricted by a namespace.

Jones teaches elements of an XML file have an associated namespace; each XML

document can use a namespace to identify the type of XML associated with the document (Jones,

[0001], [0002]).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to have combined Jones' teaching of namespace into O'Neil's XML

document to associate a namespace to the document, since the combination would have used the

namespace for identify the type, the elements of the XML document, wherein the namespace is

commonly used as Jones' disclosed in paragraph 0002.

Regarding claim 12, which is dependent on claim 9, O'Neil teaches transferring said

tagged documents in a designated priority order (O'Neil, fig.4, transferring the divided

documents in fig.4, which is specified ORDPATH priority for reconstructing).

Regarding claim 11, which is dependent on claim 10, O'Neil teaches converting step

comprises a step of converting the document to a new structured document that added index and

depth information for said documents by means of attribute values (O'Neil, figures 2-4; [0019],

[0032], [0045], [0046]; converting the xml structured document in fig.2 into tagged documents in

fig.4 that added depth and index information (ORDPATH information) indicating a position in

the xml structured document). However, O'Neil does not explicitly disclose attribute values

restricted by a namespace.

Jones teaches elements of an XML file have an associated namespace; each XML

document can use a namespace to identify the type of XML associated with the document (Jones,

[0001], [0002]).

· It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to have combined Jones' teaching of namespace into O'Neil's XML

document to associate a namespace to the document, since the combination would have used the

namespace for identify the type, the elements of the XML document, wherein the namespace is

commonly used as Jones' disclosed in paragraph 0002.

Regarding claim 14, which is dependent on claim 10, O'Neil teaches wherein said

restoring step comprises the steps of: extracting said positional information from said converted

tagged documents and resorting said tagged document in accordance with said positional

information; and deleting said positional information from said tagged document to restore said

original structured document represented by XML format (O'Neil, [0047]; reconstructing the

xml document in fig.2 based on "ORDPATH" information from the tagged documents in fig.4,

wherein the ORDPATH information does not appear in tagged documents in the reconstructed

document).

Regarding claim 15, which is dependent on claim 11, O'Neil teaches the steps of:

resorting said tagged documents in the line direction of the document, in accordance with said

indexes of said converted tagged documents; ordering said tagged documents hierarchically, in

accordance with said depth information of said tagged documents to restore said original

structured document represented by XML format (O'Neil, [0047]; reconstructing the xml

document in fig.2 based on "ORDPATH" information from the tagged documents in fig.4,

wherein the ORDPATH information does not appear in tagged documents in the reconstructed

document).

Claims 16-18 are for computer program (O'Neil, [0023]) performing the method of

claims 1, 6 and 9 respectively and are rejected under the same rational.

9.   **Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

O'Neil in view of Jones as applied to claims 1 and 9 as explained above, and further in view

of Kanie et al., US 2002/0002567 A1, filed 01/18/01.

Regarding claim 5, which is dependent on claim 1, O'Neil teaches dividing the

document by said tags (O'Neil, figures 2-4; [0019], [0032], [0045], [0046]; dividing xml

structured document in fig.2 by tag elements). O'Neil teaches updating or changing the xml

structured document in fig.2 by inserting nodes (O'Neil, [0049], [0059]). However, O'Neil does

not explicitly disclose extracting differential information relating to an original structured

document and an updated structured document.

Kanie teaches extracting differential information relating to an original structured document and an updated structured document (Kanie, abstract, [0050], [0052]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kanie's teaching into O'Neil's teaching to extracting different information relating to an original structured document and an updated structured document, since the combination would have created a multi-version document and displaying changes made to all version documents as disclosed by Kanie as well as converted structured documents as O'Neil disclosed, which includes original, updated or multi-version document.

Regarding claim 13, which is dependent on claim 9, O'Neil teaches and dividing the document by said tags (O'Neil, figures 2-4; [0019], [0032], [0045], [0046]; dividing xml structured document in fig.2 by tag elements); editing said tagged documents in accordance with the positional information of said converted tagged documents in said original structured document (O'Neil, [0047]; editing said tagged documents in fig.4 to reconstruct the xml document in fig.2 based on "ORDPATH" information). O'Neil teaches updating or changing the xml structured document in fig.2 by inserting nodes (O'Neil, [0049], [0059]). However, O'Neil does not explicitly disclose extracting differential information relating to an original structured document and an updated structured document.

Kanie teaches extracting differential information relating to an original structured document and an updated structured document (Kanie, abstract, [0050], [0052]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kanie's teaching into O'Neil's teaching to extracting

different information relating to an original structured document and an updated structured

document, since the combination would have created a multi-version document and displaying

changes made to all version documents as disclosed by Kanie as well as converted structured

documents as O'Neil disclosed, which includes original, updated or multi-version document.

Response to Arguments

10.   Applicant's arguments filed on 04/20/06 have been fully considered but they are not

persuasive.

Applicant argues that "O'Neil does not teach a retention of an XML format and

converting a structured document of XML format into a tagged document still of XML format.

Rather, O'Neil teaches converting a XML document into a tree structured document ... That is

O'Neil merely teaches converting a XML document into a Document Object Model (DOM) tree

that is not in XML format" (Remarks, page 9).

It is noted that applicant claim "converting the structured document to a new structured

document **represented** by XML format". Therefore, the DOM tree perfectly matches for

representing by XML document.

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Torii et al., US 2003/0084078 A1, filed 05/02, teaches structured document

transformation method.

Jakopac et al., US 2002/0029229 A1, filed 06/01, teaches method for data compression.

Thusoo et al., US 2005/0228791 A1, filed 06/04, teaches efficient queribility and

manageability of an XML index with pat subsetting.

12.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing
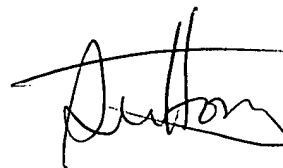
date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thu V. Huynh whose telephone number is (571) 272-4126. The

examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TVH

STEPHEN HONG
SUPERVISORY PATENT EXAMINER